

CLAIMS:

1. A plasma picture screen provided with a phosphor layer (9) which comprises a phosphor which is intrinsically pigmented.

2. A plasma picture screen as claimed in claim 1, characterized in that the phosphor is intrinsically pigmented in that the host lattice of the phosphor comprises an ion which has absorption bands within the host lattice in the wavelength range of the emission of the phosphor.

3. A plasma picture screen as claimed in claim 1, characterized in that the phosphor has the composition $(\text{Ba}_{1-x-y}\text{Sr}_x)(\text{Mg}_{1-z}\text{Co}_z)_o\text{Al}_p\text{O}_q:\text{Eu}_y$ with $0 \leq x < 1$, $0.01 \leq y \leq 0.40$, $0 \leq z < 1$, and with $o =$ chosen from the groups 1 and 3, $p =$ chosen from the groups 10 and 14, and $q =$ chosen from the groups 17 and 23.

4. A luminous screen provided with a phosphor layer which comprises a phosphor which is intrinsically pigmented.

5. A phosphor preparation comprising a phosphor which is intrinsically pigmented.

6. A phosphor with the composition $(\text{Ba}_{1-x-y}\text{Sr}_x)(\text{Mg}_{1-z}\text{Co}_z)_o\text{Al}_p\text{O}_q:\text{Eu}_y$ with $0 \leq x < 1$, $0.01 \leq y \leq 0.40$, $0 \leq z < 1$, and with $o =$ chosen from the groups 1 and 3, $p =$ chosen from the groups 10 and 14, and $q =$ chosen from the groups 17 and 23.

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